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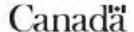DEFENCE **R&D** DÉFENSE

Mixed Methods Approach to Assessing an Informal Buddy Support System for Canadian Forces Reservists

Donna I. Pickering

Tara Holton

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Donna I. Pickering

Tara Holton

Defence R&D Canada – Toronto

Principal Author

Original signed by Donna I. Pickering

Donna I. Pickering

Defence Scientist

Approved by

Original signed by Stephen Boyne

Stephen Boyne

Head, Individual Behaviour and Performance Section

Approved for release by

Original signed by Dr. Stergios Stergiopoulos

Dr. Stergios Stergiopoulos

Acting Chair, Knowledge and Information Management Committee

Acting Chief Scientist

14cb04

Abstract

This report outlines the mixed research methodology used in a study assessing an informal buddy support system for Canadian Forces Reservists. It describes the procedure used to transcribe information arising from interview and focus group data. The process involved in developing a template to be used to analyze the interview and focus group data is also described. A survey was completed by participants following completion of the qualitative portion of the research. The types of questions asked (closed and open ended), the rationale for asking these questions in a survey format, and the ways in which it complemented the information obtained from the focus group/interview portion of the study are discussed. The benefits of using a mixed methods approach to addressing complex research questions are provided along with a discussion about why this type of approach is not used more often in research despite its many advantages.

Résumé

Dans le présent rapport, nous décrirons la démarche mixte que nous avons employée dans le cadre d'une étude visant à évaluer un service de soutien informel par jumelage offert aux réservistes des Forces canadiennes. Nous décrirons la démarche employée pour transcrire les informations provenant des données recueillies au cours des entrevues et des groupes de discussion. Nous décrirons également le processus employé pour élaborer un modèle d'analyse des données de ces entrevues et groupes de discussion. Une fois la partie qualitative de la recherche terminée, nous avons mené une enquête auprès des participants. Dans le présent document, nous présenterons les types de questions posées (questions fermées et ouvertes), nous expliquerons la raison pour laquelle nous avons posé ces questions sous la forme d'un sondage et nous indiquerons en quoi les réponses nous ont aidés à compléter le tableau des informations obtenues lors de la partie précédente de la recherche. Nous énumérerons les avantages d'utiliser une démarche mixte lorsqu'on s'attaque à une question de recherche complexe et nous expliquerons pourquoi une telle démarche n'est pas utilisée plus souvent malgré ses nombreux avantages.

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Executive summary

Mixed Methods Approach to Assessing an Informal Buddy Support System for Canadian Forces Reservists:

Donna I. Pickering; Tara Holton; DRDC Toronto TM 2011-028; Defence R&D Canada – Toronto; April 2011.

Study Overview:

This report outlines the mixed methods research methodology used in a study assessing an informal buddy support system for Canadian Forces (CF) Reservists. This system was developed to provide an informal source of support to Reservists who are deploying and to their families. Reservists typically do not have a formal rear-party system to meet their support needs as do Regular Forces members.

The main objective of the overall research is to provide a better understanding of the system in general, variations in how it is implemented, perceptions regarding the effectiveness of the system, changes recommended as well as benefits and drawbacks of the system. In order to truly answer these key research questions the use of a mixed methods approach (i.e., focus group/interview and survey methodologies) is necessary. This report focuses on the procedures, rationale, and strengths of using this type of approach in order to address complex research questions such as understanding and evaluating an informal buddy support system for CF Reservists who are deploying, and their families.

Significance of Research:

There are many benefits to using a mixed methods approach to address complex research questions. However, due to a variety of reasons, including the fact researchers are typically trained in either qualitative or quantitative research methods, a mixed methods approach to research may not be used as often as it should. In many instances, such as when complex research questions need to be addressed, the use of a mixed methods approach to research should be considered when researchers are designing their studies. If such an approach is required, it may necessitate researchers with different backgrounds, i.e., one focusing on qualitative research methods and another focusing on quantitative research methods, to work together. It is only by using this mixed methods approach to research that a comprehensive understanding of complex research questions can truly be obtained.

Next Phase of Research:

The next phase of the research process is the analysis of the qualitative and quantitative data collected to address the main research objectives. This process will involve analyzing the interview/focus group and survey data separately, and then organizing the information obtained from each source with respect to which one of the research questions it answers. Finally, this information will be combined in order to obtain a more complete understanding of the informal buddy system, individuals' experiences with the system, and recommendations on ways it can be improved.

Sommaire

Mixed Methods Approach to Assessing an Informal Buddy Support System for Canadian Forces Reservists:

Donna I. Pickering; Tara Holton; DRDC Toronto TM 2011-028; R & D pour la défense Canada – Toronto; octobre 2011.

Aperçu

Dans le présent rapport, nous décrirons la démarche mixte que nous avons employée dans le cadre d'une étude visant à évaluer un service de soutien informel par jumelage offert aux réservistes des Forces canadiennes (FC). Ce service a été mis sur pied dans le but de fournir une ressource de soutien informel aux réservistes en mission et à leurs familles. Contrairement aux membres de la Force régulière, les réservistes ne sont généralement pas appuyés par un détachement arrière qui veille à leurs besoins.

Les objectifs principaux de cette recherche sont d'étudier le fonctionnement de ce service dans son ensemble, de connaître les diverses façons dont celui-ci peut être mis en œuvre, de recueillir les impressions des gens quant à son efficacité, d'examiner les changements recommandés et de déterminer ses avantages et ses inconvénients. Pour parvenir à ces fins, il est nécessaire d'adopter une démarche englobant diverses méthodes d'évaluation (groupes de discussion, entrevues et enquêtes). Dans le présent rapport, nous nous attarderons à la procédure, à la raison d'être et aux forces d'une telle démarche pour une tâche aussi complexe que comprendre et évaluer un service de soutien informel par jumelage à l'intention des réservistes des FC en mission et de leurs familles.

Portée

L'utilisation d'une démarche mixte pour élucider des questions de recherche complexes comporte de nombreux avantages. Cependant, pour diverses raisons, dont le fait que les chercheurs sont habituellement formés pour employer un seul type de méthode de recherche – quantitative ou qualitative –, la démarche mixte n'est pas utilisée aussi souvent qu'elle devrait l'être. Dans beaucoup de cas, comme lorsqu'ils sont confrontés à une question de recherche complexe, les chercheurs devraient envisager l'adoption d'une démarche mixte. Une telle démarche exige souvent que l'on réunisse des chercheurs de formations diverses, c'est-à-dire que l'un d'eux s'occupera de l'aspect qualitatif de la recherche tandis que l'autre se chargera de l'aspect quantitatif. Sans une démarche mixte, il sera très difficile d'éclaircir une question de recherche complexe en entier.

Prochaine étape

À la prochaine étape de la recherche, nous analyserons les données qualitatives et quantitatives que nous avons recueillies afin de réaliser les principaux objectifs fixés. Cette tâche consistera à analyser séparément les données recueillies au moyen des entrevues/groupes de discussion et de l'enquête, puis à organiser les informations obtenues selon les questions auxquelles elles répondent. Enfin, nous regrouperons ces informations pour obtenir un portrait plus complet du

service de soutien informel par jumelage, de l'appréciation des gens y ayant recours et des suggestions quant aux moyens de l'améliorer.

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Acknowledgements

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1 Introduction

1.1 Background

During a deployment, Canadian Forces (CF) members have a variety of support requirements that need to be met in order to ensure they remain connected with home and family. This role is fulfilled for Regular Forces CF members by their unit's rear-party located at their home base in Canada. "Rear party refers to those personnel that are not deployed on an overseas operation and remain at the home unit to continue with the normal daily business of the unit. The rear party is also available to support the families of deployed soldiers." [10]. Reservists, however, typically do not receive this type of unit support (i.e., support pertaining to family or personal matters) when they deploy. Consequently, personal or family-related issues arising during the Reservist's deployment may contribute to anxiety about what is happening back at home. In light of this, some Commanding Officers (CO) have decided to informally provide assistance to members of their Reserve units. More specifically, an "informal buddy support system" has been developed as a means of providing support to deployed Reservists and their families. Using this approach, a deployed Reservist is matched with a non-deployed member of the same unit and the non-deployed member takes on the role of the rear-party advocate providing assistance to the deployed member and his/her family. The rear party advocate is typically known as a "buddy." This approach is in line with recommendations highlighting ways to better support Reservists made by the Interallied Confederation of Reserve Officers (CIOR), in a symposium summary document prepared November 20th, 2007 focusing on the post-deployment care of Reservists [5].

1.2 Research Objectives

The current research has been proposed as a means of obtaining a better understanding of this "Informal Buddy Support System for Reserve Force Members." A series of key research questions were developed in order to meet this objective. These questions are as follows:

1. What are the support needs of Reservists deploying and their families?

2. What are the ways in which the system was implemented based on the experiences of implementers and individuals involved with the system?

3. How does the use of this support system impact Reservists (and their families) who are a part of this system? (i.e., what are the benefits, any drawbacks)

4. How do the experiences of Reservists with a buddy (i.e., a rear party advocate) compare to Reservists who do not have a buddy (i.e., a rear party advocate)?

5. Are there any ways in which the system could be improved upon?

1.3　Approach Used to Address Research Objectives

The focus of the current report is to describe the mixed methods approach used to address these five main research objectives. It was deemed important to summarize the mixed methods procedures used, and in some instances developed, for this research because there has been a limited amount of research undertaken at Defence Research and Development Canada (DRDC) Toronto, and perhaps at other DRDC facilities, using this combined approach. It will become apparent in the sections that follow outlining the procedures and rationales for using focus group/interview and survey methodologies that there are benefits to using this combined approach to address complex research questions such as those entailed in the "Informal Buddy System for Canadian Forces Reservists".

2   Mixed Methods: Focus on Qualitative Component

2.1   Rationale for Use of Mixed Methods Approach

The mixed methods design used in this study was chosen for pragmatic reasons. While neither the survey nor the interview/ focus group methodologies alone provide a complete understanding of the "buddy system," the two methodologies combined allow for triangulation on the main research questions. These two methodologies complement one another to provide a more fulsome understanding of the impact that the buddy system has on Reservists and their families, and provide a better understanding of the system in general, including variations in how it is implemented, perceptions regarding the effectiveness of the system, changes recommended, as well as benefits and drawbacks of the system.

2.2   Qualitative Data Collection Procedure

The qualitative portion of this mixed methods design involved one-on-one interviews and focus groups with Reservists. Potential interview/focus group participants were provided with an Information Letter describing the study and asked to complete a Voluntary Consent Form indicating their consent to participate in the research, following approval from the DRDC Human Research Ethics Research Committee. They were provided with the interview/focus group questions before commencing their interview/focus group session. Interviews/focus groups were semi-structured in format, and were conducted by the Principal Investigator or a Co-Investigator, with the exception of one focus group conducted by technical staff.

Interviews and focus groups took place between February and August 2010. Interviews were approximately one hour in length while the focus groups were approximately 2 hours in length.

Interviews were conducted in person or by telephone, and took place in private meeting rooms or offices of the interviewer and interviewee. Individuals involved in the implementation of the system were interviewed. Focus groups of three to six individuals were conducted in person. The three focus groups included 1) advocates (i.e., buddies); 2) individuals who deployed and had an advocate and, 3) individuals who deployed and did not have an advocate. If an individual was unable to participate in a focus group (i.e., advocates, deployed with or without an advocate) (s)he was interviewed instead.

2.3   Research Questions Addressed by Qualitative Data Collection Methodology

Focus group questions were designed around the study's main research questions discussed earlier. The purpose of the focus group questions was to elicit general information about the rear-party advocate system, the implementation of the system, perceived benefits and drawbacks to the system, as well as areas for improvement. Interview questions were also designed around the study's main research questions but varied depending upon the target interviewee (e.g., implementer, advocate, member who deployed with or without an advocate). Interview questions were generally based on the same topics as the focus groups, and designed to elicit the same information, with the additional focus on the support needs of soldiers and their families.

Interview/focus group participants were asked to reflect on their experiences without providing information that directly or indirectly identified individuals. Participants were provided an opportunity to seek clarification or further information from the Principal Investigator or Co-Investigator before, during, or after the study. Interviews/focus groups were digitally recorded (with consent) and subsequently transcribed for analysis.

2.4 Tools and Techniques used in Transcription and Analysis of Qualitative Data

Transcription proceeded using transcription conventions derived from Edwards and Potter (1992) [2], but which have been further developed to suit the needs of research projects conducted at DRDC Toronto. These new conventions for transcription were first used in a pilot study associated with Protocol L-692A [4] and TR 2009-198 [3], and are described in Annex A.

Conventional qualitative data-analytical tools and techniques will be used to analyze the interview and focus group data. Specifically, NVivo8 [QRS International Inc (Americas) Cambridge, Massachusetts, USA], a qualitative research software package, will be used to categorize themes and issues pertaining to specific interview/focus group questions as well as themes and issues that emerge from the interviews/focus groups. To date, preliminary analysis of the interviews and focus groups has commenced. A template of the key categories (called nodes in NVivo8) has been determined and the template tested. There are two types of nodes, tree nodes and free nodes. Tree nodes represent categories, or subcategories, etc. [9] and are organized into a hierarchical structure [9]. Free nodes are "stand alone" nodes that do not logically fit in connection with other nodes and thus are not incorporated into the hierarchical tree node structure [9]. The following outlines the creation of the template and its testing.

2.5 Development of Template to Analyze Qualitative Data

The template for qualitative analysis of the interview and focus group data was initially created through a modified Delphi process. The Delphi process as applied to this setting can be described as a consensus-based method of aggregating the opinions of a team or set of experts [8]. This method occurs in a set of rounds and can continue until a pre-determined number of rounds have been completed, and/or until consensus is reached. For Round one of this process, three of the study investigators who were familiar with all of the data either through conducting the interviews, through transcription or a combination thereof, were asked to generate the main themes and sub-themes occurring within the interviews and focus groups. This team of three investigators then met for Round two of the process in which they discussed their respective themes and sub-themes and began to develop a template of tree nodes which would be used in NVivo8 for data analysis. This was done by determining which themes had agreement across the three investigators (i.e., the themes that were represented in each of the investigators' initial set of themes generated in Round one). Once the agreed upon themes were determined, the other themes were discussed and if agreed upon they were added to the template, if not agreed upon they were either modified and added to the template or dismissed. Round three, the set of investigators met again, reviewed the template and both modified the earlier themes and added new themes, resulting in consensus and a completed template. The template was then typed up by the Co-Investigator (one of the three data experts) and sent out to the three investigators for

review, all of whom agreed with the template structure as well as the descriptions added to each of the themes and sub-themes, affirming consensus had been met. No further rounds were required.

The template was then subjected to testing within the NVivo8 software. Testing of a template within the qualitative software essentially involves conducting a "mini-analysis" in which several individuals run through the analysis of a subset of data to confirm the utility of the template, point out problems with the structure of the template, and identify any missing themes or sub-themes. Testing the template is a necessary part of the qualitative process where a set template is required for multiple coders working toward a merged analysis for the purposes of testing inter-rater reliability (i.e., assessment of the degree of consensus in the ratings among evaluators) [11]. While the initial template in theory represents the dataset, in actuality, there are often changes needed as analysis occurs since qualitative analysis is by its nature an iterative process. Since a set template is required for the upcoming analysis of this dataset, testing of the template was mandatory. Three researchers went through the analysis of one interview each using the template generated by the three data experts. Each of these researchers then forwarded their list of problems or suggested changes to the co-investigator (one of the data experts), who compiled and made the recommended changes. The new template was then sent out to the other data experts, who agreed with the changes. Resulting changes recommended were minor and involved the identification of three main concerns with the template.

These changes involved clarification of node meaning by making minor changes to the title of the node, and the creation of a new set of nodes to capture the participant's experience with the buddy system, that was meant to encompass any comments regarding pre, during and post deployment experience and the addition of child nodes (i.e., a sub-category within a larger category) in order to better capture the recommendations for improvement to the buddy system made by participants.

The resulting template shown below will be used for the analysis of the interview and focus group data (MFRC refers to Military Family Resource Centre). Descriptions of each of the template categories can be found in Annex B.

TREE NODES

Benefits and Issues with the System

       Benefits
       Issues

Buddy and Deployed Relationship

       Buddy's awareness of resources
       Buddy's experience and maturity to help
       Is buddy meeting needs of Reservist
       Nature of relationship with family
       Nature of relationship with the buddy

Deployed Member's Family Needs

    Culture
    Different contact needs
    Family's role in reintegration
    Reservist's stage of life

Organization of the system

    Consistency
        Across Canada
        Communications
            Families
            Members
        Player role consistency

    Extend Beyond Deployment
        Pre-deployment inclusion
        Reintegration

    Geography
        Dispersed membership
        Expectations of MFRC
        Rural vs. urban

    Management of Expectations
        Misunderstandings
        Role of MFRC

    Semi-Formal
        Assignment of buddy
            Peer
            Rank
            Ratio
        Buddy's family involvement
        Flexible set up and use
        Training

    Buddy System Facilitator
        Experience
        Regular meetings
        Role of facilitator
        Who is the facilitator

Participant's Experience with the System

       Awareness and knowledge of buddy system
       Implementation
       Participant perceptions of the system
       Pre deployment experiences
       During deployment
       Post deployment experiences

Recommendations made by participants

       Cyclical program
       Incentives
       Other
       Suggested documents
       Suggested training
       Set up and use recommendations
       Need point of contact for buddies

FREE NODES

Communication tools
Other support
Factors inherent to being a Reservist
Reservist Needs from CF
Uncertain

2.6   Need for a Mixed Methods Approach

While there are many benefits to using focus groups and interviews (i.e., qualitative approach) to address the complex research questions asked in the current study, there are also limitations to using this approach. Typically, when there is not a lot of information known about a particular research topic (in this instance the informal buddy support system for CF Reservists) a qualitative approach is useful. This approach allows participants to express their views in a way that is minimally restrictive; they are not asked a specific question, are provided only with a few response alternatives, and asked to select the choice that best reflects their answer. The alternative is more synonymous with the use of a quantitative approach. It assumes the researcher has an idea about how people might respond and thus provides them with a number of response alternatives to choose from. However, in an area where the researcher has limited knowledge of individuals' experiences, thoughts, and feelings, it is beneficial to take an open-ended approach to asking questions, i.e., asking broader questions which allow individuals to express their thoughts, experiences, and feelings, providing ample time for them to think, reflect, and respond to each

question, thus permitting a vast amount of "rich" information to emerge. This allows the researcher to obtain a more in-depth understanding of the problem space.

Also, in the case of focus groups, having individuals discuss their own experiences in a group setting sometimes allows information that an individual might not be able to recall, or think is useful or important, to be brought forth by having others sharing their experiences. Alternatively, the composition of a focus group may inhibit individuals from indicating what they really think. Although researchers make every effort to minimize the possibility of this occurring (for example, by trying to have individuals with similar ranks or roles participate in a particular focus group, sometimes that is not possible). Creating an environment for individuals to feel free to express their views openly is something that we strove to achieve in this research. Those questions that we thought individuals may not feel comfortable answering in a focus group setting were included in the survey portion of the research, to be discussed next.

3   Mixed Methods: Focus on Survey Component

3.1   Survey Data Collection Procedure

The survey portion of the study followed the qualitative portion of the data collection. After completing a focus group or an interview, individuals who served as buddies and Reservists who deployed with or without a buddy, completed a survey. The survey consisted of two types of questions, open ended questions and closed ended survey questions.

3.2   First Objective of Survey Portion of Study

The survey served two purposes. First, it allowed questions to be asked to supplement questions addressed in the qualitative portion of the study. These questions were specifically focused on the informal buddy support system. It was felt that there might be some questions that individuals may not want to address openly in a group setting. Accordingly, by asking individuals these types of questions in a survey format they might be less concerned about what others might think of their responses (i.e., social desirability bias).

These types of questions may contribute to more socially desirable responses in the qualitative portion of the research and were thus asked in the survey portion of the research. More specifically, individuals who served as buddies, and Reservists who deployed (with or without a buddy), were asked the following open ended questions:

> "Please tell us about any specific groups or types of individuals who you feel would <u>benefit most</u> from having a buddy"

> "Please tell us about any specific groups or types of individuals who you feel would <u>benefit least</u> from having a buddy"

> "Please tell us about any specific groups or types of individuals who you feel would make <u>the best buddies</u>"

> "Please tell us about any specific groups or types of individuals who you feel would <u>not</u> make <u>very good buddies</u>"

So, for instance, it was a concern that participants may not want to answer questions about any specific groups or types of individuals who would make the best buddy or who would not make a very good buddy when there were individuals participating in the focus groups who were currently in this role. Someone may not want to offend someone acting as a buddy by implying (s)he may not be the best type of person for this role.

In line with this concern, individuals serving as buddies were asked the following two questions:

"Were you well matched with the member of your Reserve unit that was assigned to you? (Yes/No). Please explain your answer.

"Other than training is there something else that would have assisted you in serving as a buddy for a deployed Reservist?"

Also, Reservists who deployed and had buddies were asked one additional question,

"Were you well matched with your buddy" (Yes/No). Please explain your answer.

Someone may not want to say that they were not well matched and elaborate as to why so as not to offend others in the focus group. It is in this instance where it is desirable to address this issue using a survey as opposed to a focus group.

We attempted to control whenever possible for factors such as significant rank differences with respect to the composition of the focus groups that might inhibit individuals from speaking freely in the focus groups. However, it is impossible to completely control for every one of these factors. The best way to manage these types of issues is by asking some of the more "sensitive" questions in a survey.

3.3 Second Objective of Survey Portion of Study

The second objective of the survey portion of the research was to ask more general questions about Reservists' deployment and post-deployment experiences. This would be used to obtain a better understanding of how the informal buddy support system fits into the broader support requirements, sources of support, and support experiences of Reservists.

3.3.1 Support Questions

The first set of questions asked individuals about their support experiences, either with respect to the support they received (i.e., individuals who deployed with or without a buddy) or with respect to the support they provided (i.e., individuals acting as buddies).

Reservists who deployed (with or without a buddy) were asked about the support they received from a variety of sources during their deployment. These sources were: their family, their friends at home, their friends in theatre, their buddy (for Reservists who had a buddy), and other sources. Individuals were asked to specify who were these "other" sources of support.

For each source identified, individuals who deployed were asked:

- How important was it to receive support from this source?
  (Response alternatives ranged from "Not important at all" to "Extremely important")

- How much support did the person receive from this source?

(Response alternatives ranged from "No support at all" to "A lot of support")

- What type(s) of support did the person receive from this source?
  (Response alternatives ranged from indicators of emotional support, material support, appraisal support, and other types of support, specify)

- How satisfied was the person with the support received from this source?
  (Response alternatives ranged from "Not satisfied at all" to "Extremely satisfied")

- If the person was not "extremely satisfied" with the support received from this source, (s)he was asked what would have made this experience better?

Reservists who deployed and had a buddy were also asked to answer the questions (listed above) with respect to their buddy post-deployment.

Reservists who served as buddies were asked a parallel set of questions. More specifically, they were asked about the support provided to their assigned member and the member's family both during deployment and post-deployment.

For each source identified, buddies were asked:

- How important do they think it was for the (person assigned to you/assigned member's family) to receive your support (during deployment/post-deployment)?

- How much support did you provide to the (person assigned to you/assigned member's family) (during deployment/post-deployment)?

- What type(s) of support did you provide to the (person assigned to you/assigned member's family) (during deployment/post-deployment)?

- How satisfied were you with the support you provided to the (member assigned to you/assigned member's family) (during deployment/post-deployment)?

- If you were not "extremely satisfied" with the support you provided to the (person assigned to you/assigned member's family) what would have helped you to provide the best possible support to them?

3.3.2   Reintegration Questions

The first set of questions asked Reservists who had deployed (with or without a buddy) about the extent to which they were satisfied or dissatisfied with their post-deployment reintegration experiences from a variety of sources. These sources were: family, friends, Reserve unit, work

(non military) and/or school. Individuals who had buddies were also asked how satisfied/dissatisfied they were with their buddy.

These are the types of questions (i.e., asking about experiences with their Reserve unit and buddies) it was thought best to ask in a survey format so as to reduce the likelihood of individuals feeling uncomfortable in answering honestly.

Reservists who had deployed were also asked to complete a questionnaire consisting of the Army Post-Deployment Reintegration Inventory (APDRI) [1] and the Social Readjustment subscale of the Post-Deployment Readjustment Inventory (PDRI) [6]. The APDRI [1] is a 36 item measure assessing post-deployment positive and negative reintegration experiences across the personal, interpersonal, and work domains. The Social Readjustment subscale of the PDRI [6] consists of seven items focusing on reintegration difficulties related to one's social relationships.

The final set of questions asked individuals who deployed (with or without a buddy) and those who served as buddies a more general question to assess the reintegration needs of Reservists:

> "Based on your own reintegration experiences, or those of others, are there ways in which the reintegration process could be enhanced to make it better for Reservists?"

3.3.3   Background Questions

In order to obtain a better understanding of the responses provided by research participants, they were asked to complete some basic demographic questions (i.e., age category, rank, family situation, number of years in the CF, and number of tours they had been on). Reservists who had recently returned from their deployment were asked how many months ago did they return and whether or not they had been assigned a buddy.

4   Next Steps

4.1   Data Analysis

The next phase of the research process is the analysis of the qualitative and quantitative data collected so as to answer the main research objectives. This process will involve analyzing the interview/focus group and survey data separately. Information obtained from each source will be organized with respect to which one of the research questions it answers. In order to obtain a more complete understanding of the informal buddy system, information (i.e., focus group/interview and survey) on individuals' experiences with the system, and recommendations on ways it can be improved will be combined. In fact, it has been said that "mixing qualitative and quantitative research results in a more comprehensive and therefore stronger study" [7]. The rationale behind this statement is such that the weakness of one approach is compensated for by the strength in the other. For example, the issue of individuals not feeling free to answer more "sensitive" questions openly and honestly in a focus group setting may be dealt with successfully by asking the same type of question in a survey where an individual's answers are more anonymous.

4.2   Utility of this Approach

It was thought important to describe the mixed methods approach used to assess an informal buddy support system for CF Reservists because this type of approach has typically not been used at DRDC Toronto, and perhaps at other DRDC locations. One reason for this may be due to the fact that researchers are often trained in either qualitative or quantitative research methods. It is unusual to find a researcher who is confident and comfortable using both research methods. However, many research questions are best addressed using a combination of both approaches, as was the case with the current research. This means that together researchers with different backgrounds, i.e., one focusing on qualitative research methods and another focusing on quantitative research methods, can address complex research questions that could not be addressed otherwise. It is only by using this combined approach that a more comprehensive understanding of these types of questions can truly be obtained.

References

[1]   Blais, A-R, Thompson, M.M., & McCreary, D.R. (2009). The development and validation of the Army Post-Deployment Reintegration Scale. *Military Psychology*, *21*(3), 365-386.

[2]   Edwards E., & Potter J. (1992). *Discursive Psychology*, London: Sage.

[3]   Holton, T.L., Febbraro, A.R., Barnes, M., Filardo, E. –A., Fraser, B., & Spiece, R. (2009). *The Relationship between Non-Governmental Organizations and the Canadian Forces: A Pilot Study*. DRDC Toronto Technical Report (TR 2009-198). Unclassified. Internal report.

[4]   Holton, T., Febbraro, A., & Filardo, E.A. (2009). Research Ethics Protocol #L-692A. *The relationship between non-governmental organizations and the Canadian Forces: A pilot study*.

[5]   Interallied Confederation of Reserve Officers (CIOR). *2007 Summer Symposium: Post Deployment Care of Reservists.* Riga, Latvia, August 2-3, 2007. Symposium Summary Proceedings Document.

[6]   Katz, L.S., Cojucar, G., Davenport, C.T. Pedram, C., & Lindl, C. (2010). Post-Deployment Readjustment Inventory: Reliability, validity and gender differences. *Military Psychology*, *22*(1), 41-56.

[7]   Mixed methodology research [on-line]. Available: http://pagerankstudio.com/Blog/2010/05/mixed-methodology-research/

[8]   Murry, J.W., Jr., & Hammons, J.O. (1995). Delphi: A versatile methodology for conducting qualitative research. *Review of Higher Education*, *18*(4), 423-436.

[9]   QRS International (2008). NVivo 8 Fundamentals: Start working with your material. Australia: QRS International.

[10]   Reserve Soldiers Overseas Deployment Handbook for the Soldier's Family and Soldier's Unit (February 7, 2008). http://army.forces.gc.ca/lfwa/tf309/docs/handbook.pdf

[11]   Wikipedia. Inter-rater reliability. [On line]. Retrieved December 29, 2010. Available: http://en.wikipedia.org/wiki/Inter-rater_reliability

Annex A   Transcription Coding

A.1   Coding Convention Used in Research:

(Originally published in Technical Report TR 2009-198)

- Write the title of the interview (WS31404: Interview # 74)

- Times New Roman size 12 font

- In general: we are writing down the words verbatim, including noises and pauses, and intonation remarks where possible. Ex. "Ooohh (intrigued)."

- On a new line write down the time every few paragraphs.

- Single space within one speaker, double space between speakers

    o Speaker 1: I really like working at DRDC! The people in CPL are so nice and we get to do cool research projects.

    Speaker 2: Yeah I know! Who would want to work anywhere else! I love when people bake things and put them in the kitchen! Woohoo!

    Speaker 1: Let's go have some coffee.

- Set the Left Indent tab to 0.5 inches and keep the First Line Indent where it is (at 0). Each time you start a new line for a new speaker, hit tab so that it begins at 0.5 inches. Every line after that for the same speaker should begin at 0.5 inches without needing to hit tab again. Use "I" for the interviewer and "R" for the respondent.

- To indicate that someone is dragging a word (most commonly it is "um"), write the word and then the amount of time it is held for in brackets

    o The dog chased the cat around the ummmm (held 1:03-1:07) block, then ran hooome (held 1:12-1:17) to eat his dinner.

- To indicate raised intonation in a word, use the ^ symbol.

    o S1: What did you like about the job?

    S2: It's really been a pleasure to work in that type of environment, and have that kind of decision making power^. It's nice not to

have bureaucracy get in the way.

- o To indicate a drop, use this symbol in the same fashion: ↓

- Whenever there is a pause, indicate the time from beginning-end of pause

  - o What do all women love? All women love (pause 5:13-5:25) chocolate.

- If a speaker interrupts another: i) put "…" at the point of interruption by the first speaker ii) put the second speaker's speech on a new line iii) continue with the rest of the first speaker's speech on the next line, beginning with "…"

  S1: I love going on amusement park rides! The only thing is…

  S2: They make you sick?

  S1: …that yeah, they make me feel ill.

If a second speaker interrupts with an "okay," "uh-huh,"yes" etc., use the proceeding example to avoid breaking the primary speaker's speech unit

  S1: Okay, so I am still officially in graduate school a.k.a. "a student" (S2: okay) but I came to work at DRDC in order to have the experience of doing research outside of the University locale (S2: yes) in an applied setting… to get a sense of what work outside of academia looks and feels like and I am very glad to be here!

In the preceding example instead of moving the second speaker's utterance to a second line, I have just indicated it in rounded parentheses (rounded brackets)

- If there is overlap/both people talking at the same time, use square brackets for the parts of speech where there is overlap

  - S1: I went to the park [today, but I] didn't go on the swings.

    S2: [Central Park?]

    S1: No, Parkview [Park]

    S2: [Oh okay]. Why didn't you swing?

    S1: There were too many children around. I feel uncomfortable going on the swings when it's very busy. I like to swing peacefully by myself.

    In this example, "today but I" and "Central Park" were spoken at the same time, and "Park" and "Oh okay" were spoken at the same time. They are colour coded accordingly. The speech continues normally after that.

- If a part of speech is ambiguous, use round brackets and indicate the time/duration of the words you cannot hear preceded by the word "something". If you have a guess, put the guess in followed by a question mark before the time. If after review by others the speech remains unclear, the word "inaudible" will be used in place of "something"

  - We went to the circus and saw tigers, elephants, bears, (seals? – 10:23-10:24), and even some acrobats (something – 10:28-10:31) trapeze.

- To indicate emphasis on a word, use italics

  - He was doing a great job, a *really* great job.

- To indicate laughter or to qualify the way something was said, use round brackets (laughter).

- If a phrase or a few lines sound like one thing but could be another, and you want the reviewer to note that you may not have been 100% accurate, put that in bold

  - I went out for lunch today and ate like a pig. I had so many different types of food at the buffet, **some I'm not sure I even know** the name of.

Annex B   Node Summary Report

Communication tools   **Free Node**

Description

Any comments pertaining to the different forms of communication tools that are used by buddies and deployed members to communicate with one another and with family and friends (e.g., Facebook, e-mail, phone, videoconferencing, post)

Factors inherent to being a Reservist   **Free Node**

Description

There are many stressors that are inherent to being a Reservist which are not meant to be met by the buddy system (e.g. employment- having a job to come home to). Some interviewees indicated that the buddy system does informally address some of these stressors. Place any discussions about this here

Other support   **Free Node**

Description

A node to capture other support, not provided by the buddy system

Reservists Need from the CF   **Free Node**

Description

Knowledge and support needs outside of the buddy system, but pertaining to their military role. Example, information nights pre-deployment

Across Canada   **Tree Node**

Description

Comments regarding how the system should be consistent across Canada

Assignment of buddy   **Tree Node**

Description

Comments about how buddies have been or should be assigned

Awareness and knowledge of buddy system   **Tree Node**

Description

Comments pertaining to whether or not the participant was aware of the buddy system; what knowledge they have of the system

Benefits   **Tree Node**

Description

Benefits of the buddy system (e.g. peace of mind for the family)

Benefits and issues with the system   **Tree Node**

Description

Any comments regarding the benefits and drawbacks to the buddy system

Buddy and deployed relationship   **Tree Node**

Description

Comments pertaining to the relationship between the buddy and the deployed member, including the effectiveness of the relationship and reasons for this effectiveness or lack thereof

Buddy system facilitator   **Tree Node**

Description

Comments regarding the system facilitator, both existing and ideal

Buddy's awareness of resources Tree Node

Description

Descriptions of the buddy's awareness of resources available to the deployed member and to the buddy as caregiver

Buddy's experience and maturity to help Tree Node

Description

Discussions addressing whether or not a buddy has the experience and maturity to help the deploying member, including discussions of whether or not the buddy's prior experience as a buddy influenced their effectiveness

Buddy's family involvement Tree Node

Description

Comments about how involved the family should be in the buddy system

Communications Tree Node

Description

Comments regarding how the system needs to be consistent in communications

Consistency Tree Node

Description

Comments regarding how the system should be consistent across units, across Canada, and in communications to members and their families

Culture Tree Node

Description

Any comments pertaining to interaction with the family that were influenced by or involved culture

Cyclical program   **Tree Node**

Description

Suggestions that the program be made cyclical, so that those who have been buddies then teach or provide guidance to those who are new buddies

Deployed member's family needs   **Tree Node**

Description

Comments pertaining to the needs of the deployed member's family

Different contact needs   **Tree Node**

Description

Comments pertaining to different needs of each family in terms of the amount and type of contact needed or asked for

Dispersed membership   **Tree Node**

Description

Comments regarding difficulties due to the unit membership coming from a large geographic area

During deployment   **Tree Node**

Description

Participant's experience with the system during deployment

Experience   **Tree Node**

Description

Comments pertaining to what experience a system facilitator should have

Extend beyond deployment   **Tree Node**

Description

Comments regarding how the system should be in place for pre-deployment and reintegration

Families   **Tree Node**

Description

Consistency in communications with families

Families' role in reintegration   **Tree Node**

Description

Comments about how the family is involved (or not involved) in the deployed member's reintegration process

Flexible set up and use   **Tree Node**

Description

Comments about what the set up and use of the system should look like

Geography   **Tree Node**

Description

Comments regarding the need for a wider base of support, to reflect the urban, suburban and rural families

Implementation   **Tree Node**

Description

Comments about the process of how the system was created within the unit

Incentives   **Tree Node**

Description

Comments about creating incentives for being a buddy to a deployed member (e.g. certificate)

Is buddy meeting needs of Reservist   **Tree Node**

Description

Discussions about whether or not a buddy is effective in meeting the needs of the Reservist and his or her family

Issues   **Tree Node**

Description

Challenges or drawbacks to the buddy system (e.g. time lost)

Management of Expectations   **Tree Node**

Description

Comments regarding how the system should manage expectations and avoid misunderstandings regarding the role of the buddy system, the MFRC

Members   **Tree Node**

Description

Consistency in communications to members

Misunderstandings   **Tree Node**

Description

Comments referring to misunderstandings in the system and how they could be avoided

Nature of relationship with family   **Tree Node**

Description

Comments pertaining to the buddy's relationship with the deployed member's family

Nature of the relationship with the buddy   **Tree Node**

Description

Comments pertaining to the buddy's relationship with the deployed member

Need POC for buddies   **Tree Node**

Description

Comments pertaining to the need for a POC for buddies and who that POC might be (padre, civilian etc – not necessarily facilitator)

Organization of the system   **Tree Node**

Description

Comments regarding how the buddy system is currently organized and how it should or could be organized

Other   **Tree Node**

Description

Node meant to capture recommendations not covered in existing child nodes for "recommendations"

Participant's experience with the system   **Tree Node**

Description

This node covers any comments regarding the participant's personal experience with the buddy system, pre, during and post deployment

Participant perceptions of the system   **Tree Node**

Description

Comments regarding the participant's perception of the system

Peer   **Tree Node**

Description

Comments about the experience of the buddy being a personal friend

Player role consistency   **Tree Node**

Description

Comments regarding how the system should allow for consistent roles for the various players (Implementer, buddies, MFRC)

Post-deployment experiences   **Tree Node**

Description

Participant's experience with the system post deployment

Pre-deployment experiences   **Tree Node**

Description

Participant's experience with the system pre-deployment

Pre-deployment inclusion   **Tree Node**

Description

Comments suggesting the system should be extended to include the pre-deployment time period as well

Rank   **Tree Node**

Description

Comments about the experience of having or not having a buddy of the same rank

Ratio   **Tree Node**

Description

Comments about the experience of having anything other than a 1:1 'buddy to deployed' ratio

Recommendations made by participants   **Tree Node**

Description

Any recommendations for the improvement of the buddy system

Regional expectations of MFRC   **Tree Node**

Comments regarding the role of the MFRC in servicing urban, suburban, and rural families

Regular meetings   **Tree Node**

Description

Comments regarding the need for a system facilitator to meet regularly with the buddies

Reintegration Tree Node

Description

Comments suggesting that the system should be extended to include the reintegration period as well

Reservist's stage of life Tree Node

Description

Comments regarding the different needs of the family, depending on the Reservist's stage of life (single, married, married with children etc.)

Role of facilitator Tree Node

Description

Comments regarding the role of the system facilitator

Role of MFRC Tree Node

Description

Comments about the expectations about the role of the MFRC, including the amount of contact and the need for flexibility

Rural vs. urban Tree Node

Description

Comments regarding how living in a rural, urban or suburban area influences the support received

Semi-formal Tree Node

Description

Comments indicating that a semi-formal system is required

Suggested documents   **Tree Node**

Description

Suggested documents the participants would like to see provided by the buddy system (brochure, manual, one page of important information about the system, etc.)

Suggested training   **Tree Node**

Description

Suggested training for the buddy system

System set up and use recommendations   **Tree Node**

Description

Recommendations pertaining to set up and use of the buddy system

Training   **Tree Node**

Description

Comments about what training has been or should be provided to buddies

Uncertain   **Tree Node**

Description

The purpose of this category was to have a place to put comments that did not initially seem to belong under any of the existing nodes. This category was to be revisited at the end of the analysis to see if the comments should indeed be coded somewhere or were there comments that did not belong to a node and did not need to be included.

Who is the facilitator   **Tree Node**

Description

Comments about who the system facilitator should be (Padre, Civilian, RSM)

List of symbols/abbreviations/acronyms/initialisms

APDRI	Army Post-Deployment Reintegration Inventory
CF	Canadian Forces
CIOR	Interallied Confederation of Reserve Officers
CO	Commanding Officer
DRDC	Defence Research & Development Canada
MFRC	Military Family Resource Centre
NVivo	Non-Numerical Unstructured Data Indexing Searching and Theorizing
PDRI	Post-Deployment Readjustment Inventory

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(U) This report outlines the mixed research methodology used in a study assessing an informal buddy support system for Canadian Forces Reservists. It describes the procedure used to transcribe information arising from interview and focus group data. The process involved in developing a template to be used to analyze the interview and focus group data is also described. A survey was completed by participants following completion of the qualitative portion of the research. The types of questions asked (closed and open ended), the rationale for asking these questions in a survey format, and the ways in which it complemented the information obtained from the focus group/interview portion of the study are discussed. The benefits of using a mixed methods approach to addressing complex research questions are provided along with a discussion about why this type of approach is not used more often in research despite its many advantages.

(U) Dans le présent rapport, nous décrirons la démarche mixte que nous avons employée dans le cadre d'une étude visant à évaluer un service de soutien informel par jumelage offert aux réservistes des Forces canadiennes. Nous décrirons la démarche employée pour transcrire les informations provenant des données recueillies au cours des entrevues et des groupes de discussion. Nous décrirons également le processus employé pour élaborer un modèle d'analyse des données de ces entrevues et groupes de discussion. Une fois la partie qualitative de la recherche terminée, nous avons mené une enquête auprès des participants. Dans le présent document, nous présenterons les types de questions posées (questions fermées et ouvertes), nous expliquerons la raison pour laquelle nous avons posé ces questions sous la forme d'un sondage et nous indiquerons en quoi les réponses nous ont aidés à compléter le tableau des informations obtenues lors de la partie précédente de la recherche. Nous énumérerons les avantages d'utiliser une démarche mixte lorsqu'on s'attaque à une question de recherche complexe et nous expliquerons pourquoi une telle démarche n'est pas utilisée plus souvent malgré ses nombreux avantages.

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